Application No.:09/837,988

Reply to Office Action of February 12, 2004

Listings of Claims:

1. (Previously Amended) An input device, comprising:

a plurality of function switches each provided corresponding to a plurality of electronic devices for selecting one of these devices by manual operation;

a controller unit for controlling the electronic devices;

a first warning unit for generating warning signals for informing an operator of the function switches of a mistaken action on the function switches; and

a mistake counter means for monitoring the manual operation on the function switches to count and store the number of mistakes on each of the function switches.

wherein the mistake counter means determines that the preceding manual operation of the function switch is a mistake when another function switch is manually operated within a predetermined period of time after any one of the function switches has been manually operated, and increments the counted number of mistakes by counting the preceding manual operation of the function switch as a mistake; and

wherein the controller unit instructs the first warning unit to generate the warning signals when the counted number of mistakes reaches a predetermined threshold number.

- 2. (Previously Amended) An input device according to claim 1, wherein the controller unit allows the electronic device selected by a function switch manually operated in the first action to be replaced with another device assigned to any of the other function switches after generating the warning signals.
 - 3. (Previously Amended) An input device, comprising:

a plurality of function switches each provided corresponding to a plurality of electronic devices for selecting one of the devices by manual operation;

a controller unit for controlling the electronic devices; and

Application No.:09/857,988
Reply to Office Action of February 12, 2004

a mistake counter means for monitoring the manual operation on the function switches to count and store the number of mistakes for each of the function switches,

wherein the mistake counter means determines that the preceding manual operation of the function switch is a mistake when another function switch is manually operated within a predetermined period of time after any one of the function switches has been manually operated, and increments the counted number of mistakes by counting the preceding manual operation of the function switch as a mistake; and

wherein the controller unit replaces the assigned electronic device selected by the function switch operated in the preceding manual action with another electronic device selected by any of the other function switches, when the counted number of mistakes reaches a predetermined threshold number.

4. (Original) An input device according to claim 3, further comprising a second warning unit for generating notification signals for informing an operator of the function switches of the automatic reassignment of the electronic device, wherein

the controller unit instructs the second warning unit to generate the notification signals when the device reassignment has been performed.

- 5. (Original) An input device according to claim 1, wherein the function switches are provided in a console box and the electronic devices selected by the function switches are electric components equipped in an automobile.
- 6. (Original) An input device according to claim 2, wherein the function switches are provided in a console box and the electronic devices selected by the function switches are the electric components equipped in an automobile.
- 7. (Original) An input device according to claim 3, wherein the function switches are provided in a console box and the electronic devices selected by the function switches are the electric components equipped in an automobile.

- 8. (Original) An input device according to claim 4, in which: the function switches are provided in an instrument panel and the electronic devices selected by the function switches are the electric components equipped in an automobile.
 - 9. (Previously Amended) An input device, comprising:

a manual operating pad manually manipulatable in two or more directions for selecting a functionality of each electronic device by the operating direction;

a controller unit for controlling the electronic devices;

a first warning unit for generating warning signals for informing an operator of the manual operating pad of a mistaken action on the manual operating pad; and

a mistake counter means for monitoring the manual operation on the manual operating pad by the operator to count and store the number of mistakes in each operating direction of the manual operating pad,

wherein the mistake counter means determines that the preceding manual operation of the manual operating pad is a mistake when the manual operating pad is manually operated in another operating direction within a predetermined period of time after the manual operating pad has been manually operated, and increments the counted number of mistakes by counting the preceding manual operation of the manual operating pad as a mistake; and

wherein the controller unit instructs the first warning unit to generate the warning signals when the counted number of mistakes reaches a predetermined threshold number.

10. (Previously Amended) An input device according to claim 9, wherein the assignment of the electronic device selected by the preceding manual action to an operating direction can be swapped with another assignment of another device selected in another operating direction by means of the controller unit after generating the warning signals.

11. (Previously Amended) An input device, comprising:

a manual operating pad manually manipulatable in two or more directions for selecting a functionality of each electronic device by the operating direction:

a controller unit for controlling the_electronic devices [to execute the function of each electronic device]; and

a mistake counter means for monitoring the manual operation on the manual operating pad by the operator to count and store the number of mistakes in each operating direction of the manual operating pad,

wherein the mistake counter means determines that the preceding manual operation of the manual operating pad is a mistake when the manual operating pad is manually operated in another operating direction within a predetermined period of time after the manual operating pad has been manually operated, and increments the counted number of mistakes by counting the preceding manual operation of the manual operating pad as a mistake; and

wherein the controller unit replaces the function of the electronic device selected by the operating direction in a preceding manual action of the manual operating pad with another function of the electronic device selected in any of the other operating directions when the counted number of mistakes reaches a predetermined threshold number.

12. (Previously Amended) An input device according to claim 11, further comprising:

a second warning unit for generating notification signals for informing the operator of the reassignment done; wherein

the controller unit instructs the second warning unit to generate the notification signals when the device reassignment has been performed.

13. (Original) An input device according to claim 9, wherein the function switches and the manual operating pad are mounted in a console box

Application No.:09/837,988
Reply to Office Action of February 12, 2004

of an automobile and the electronic devices are electric components equipped on board selected by the function switches, as well as the functions are individual functions of each of the electric components in an automobile.

- 14. (Original) An input device according to claim 10, wherein the function switches and the manual operating pad are provided mounted in a console box and the electronic devices selected by the function switches are electric components equipped in an automobile, as well as the functions are individual functions of each of the electric components in an automobile.
- 15. (Original) An input device according to claim 11, wherein the function switches and the manual operating pad are provided mounted in a console box and the electronic devices selected by the function switches are electric components equipped in an automobile, as well as the functions are individual functions of each of the electric components in an automobile.
- 16. (Original) An input device according to claim 12, wherein the function switches and the manual operating pad are provided mounted in a console box and the electronic devices selected by the function switches are electric components equipped in an automobile, as well as the functions are individual functions of each of the electric components in an automobile.
- 17. (Previously Added) An input device according to claim 1, wherein the first warning unit is any one of a display device, an audio output device, a ringing device, and a light emitting device.
- 18. (Previously Added) An input device according to claim 4, wherein either the first warning unit or the second warning unit, or both the first warning unit and the second warning unit, are any one of a display

Application No.:09/837,988

Reply to Office Action of February 12, 2004

device, an audio output device, a ringing device, and a light emitting device.

- 19. (Previously Added) An input device according to claim 9, wherein the first warning unit is a vibrator device incorporated in any one of a display device, an audio output device, a ringing device, and a light emitting device.
- 20. (Previously Added) An input device according to claim 12, wherein either the first warning unit or the second warning unit, or both the first warning unit and the second warning unit, are any one of a display device, an audio output device, a ringing device, and a light emitting device.
 - 21. (Previously Added) An input device, comprising:

a plurality of function switches each provided corresponding to a plurality of electronic devices for selecting one of these devices by manual operation;

a controller unit for controlling the electronic devices; and

a mistake counter means for monitoring the manual operation on the function switches to count and store the number of mistakes on each of the function switches.

wherein the mistake counter means determines that the preceding manual operation of the function switches is a mistake when another function switch is manually operated within a predetermined period of time after any one of the function switches

has been manually operated, and increments the counted number of mistakes by counting the preceding manual operation of the function switch as a mistake.

22. (Previously Added) An input device, comprising:

a manual operating pad manipulatable in two or more directions for selecting a functionality of each electronic device by the operating direction;

a controller unit for controlling the electronic devices; and

a mistake counter means for monitoring the manual operation on the manual operating pad by the operator to count and store the number of mistakes in each operating direction of the manual operating pad,

Application No.:09/837,988
Reply to Office Action of February 12, 2004

wherein the mistake counter means determines that the preceding manual operation of the manual operating pad is a mistake when the manual operating pad is manually operated in another operating direction within a predetermined period of time after the manual operating pad has been manually operated, and increments the counted number of mistakes by counting the preceding manual operation of the function switch as a mistake.